European Study to Establish Biomarkers of Human Ageing

Fact Sheet

Project Information

MARK-AGE
Grant agreement ID: 200880
Status
Closed project
Start date
1 April 2008
End date
30 September 2013

Funded under
FP7-HEALTH
Overall budget
€ 15 907 409,60
EU contribution
€ 11 989 327

Coordinated by
UNIVERSITAT KONSTANZ
Germany

Objective

The rate of ageing in humans is not uniform, due to genetic heterogeneity and the influence of environmental factors. Age-related changes in body function or composition that could serve as a measure of “biological” age and predict the onset of age-related diseases and/or residual lifetime are termed “biomarkers of ageing”. Many candidate biomarkers have been proposed but in all cases their variability in cross-sectional studies is considerable, and therefore no single measurement has so far proven to yield a useful biomarker of ageing on its own, probably due to the multi-causal and multi-system nature of ageing. We propose to conduct a population study (3,300 probands) to identify a set biomarkers of ageing which, as a combination of parameters with appropriate weighting, would measure biological age better than any marker in isolation. Two large groups of subjects will be recruited, i.e. (1) randomly recruited age-stratified individuals from the general population covering the age range 35-74 years and (2) subjects born from a long-living parent belonging to a family with long living sibling(s) already recruited in the framework of the GEHA project. For genetic reasons such individuals (“GEHA offspring”) are expected to age
at a slower rate. They will be recruited together with their spouses as controls, thus allowing initial validation of the biomarkers identified. (3) A small number of patients with progeroid syndromes will also be included in the study. A wide range of candidate biomarkers will be tested, including (a) “classical” ones for which data from several smaller studies have been published; (b) “new” ones, based on recent preliminary data, as well as (c) “novel” ones, based on recent research on mechanistic aspects of ageing, conducted by project participants. Bioinformatics will be used in order to extract a robust set of biomarkers of human ageing from the large amounts of data to be generated and to derive a model for healthy ageing.

Programme(s)

Topic(s)

Call for proposal

FP7-HEALTH-2007-A

Funding Scheme

CP-IP - Large-scale integrating project

Coordinator

UNIVERSITAT KONSTANZ

Address
Universitatsstrasse 10
78464 Konstanz
Germany

Website
Contact the organisation

Administrative Contact
Gertraud Plaza-Pascual (Ms.)

Participants (27)

BIOTESYS GMBH

Germany

EU contribution
€ 456 000
**FUNDACION CENTRO NACIONAL DE INVESTIGACIONES ONCOLOGICAS CARLOS III**

Spain

EU contribution
€ 498 000

Address
Calle Melchor Fernandez
Almagro 3
28029 Madrid

Activity type
Research Organisations

Website

Administrative Contact
Jose Louis Narro (Mr.)

**DNAGE BV**

Netherlands

EU contribution
€ 173 051

Address
Darwinweg 24
2333CR Leiden

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website

Administrative Contact
Ingrid Van Der Pluijm (Dr.)

**ERASMUS UNIVERSITAIR MEDISCH CENTRUM ROTTERDAM**

Netherlands

EU contribution
€ 500 000

Address
Activity type
UNIVERSITE DE NAMUR ASBL
Belgium
€ 454 470

Address
Rue De Bruxelles 61
5000 Namur

Activity type
Higher or Secondary Education Establishments

Website
Contact the organisation

Administrative Contact
Michele Fontaine (Dr.)

IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE
United Kingdom

Address
South Kensington Campus
Exhibition Road
SW7 2AZ London

Activity type
Higher or Secondary Education Establishments

Website
Contact the organisation

Administrative Contact
Michael Robinson (Mr.)

OESTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
Austria
€ 591 309

Address
Dr. Ignaz Seipel-platz 2
1010 Wien

Activity type
Research Organisations

Website
Contact the organisation

Administrative Contact
Beatrix Grubeck-Loebenstein (Prof.)
ISTITUTO NAZIONALE DI RIPOSO E CURA PER ANZIANI INRCA
Italy
EU contribution
€ 298 000
Address  Activity type
Via Santa Margherita 5  Research Organisations
60124 Ancona
Website  Contact the organisation
Administrative Contact
Fiorella Marcellini (Dr.)

NESTEC SA
Switzerland
Address  Activity type
Avenue Nestle 55  Private for-profit entities
1800 Vevey (excluding Higher or
Secondary Education
Establishments)
Website  Contact the organisation
Administrative Contact
Sebastiano Collino (Dr.)

ETHNIKO IDRYMA EREVNON
Greece
EU contribution
€ 359 000
Address  Activity type
Vas Konstantinou 48  Research Organisations
11635 Athina
Website  Contact the organisation
Administrative Contact
Efstathios S. Gonos (Dr.)

INSTYTUT BIOLOGII DOSWIADCZALNEJ IM. M. NENCKIEGO POLSKIEJ
AKADEMII NAUK
Poland
EU contribution
**ANA ASLAN INSTITUTE OF GERONTOLOGY AND GERIATRICS**

Romania

EU contribution

€ 234 000

Address

Strada Manastirea
Caldarusani 9
11241 Bucharest

Activity type

Higher or Secondary Education Establishments

Contact the organisation

Administrative Contact

Daniela Gradinaru (Prof.)

**RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU**

Netherlands

EU contribution

€ 682 200

Address

Antonie Van Leeuwenhoeklaan 9
3721 MA Bilthoven

Activity type

Research Organisations

Website

Contact the organisation

Administrative Contact

Peter Van Altena (Mr.)

**STRATICELL SCREENING TECHNOLOGIES SA**

Belgium

EU contribution

€ 509 280

Address

Rue Jean Sonet 10 Parc

Activity type

Private for-profit entities
Scientifique Crealys Cri Andromede
5032 Gembloux Les Isnes
(excluding Higher or Secondary Education Establishments)

Website Contact the organisation

Administrative Contact
Michel Salmon (Dr.)

AARHUS UNIVERSITET

Denmark
EU contribution
€ 358 000

Address Activity type
Nordre Ringgade 1 Higher or Secondary
8000 Aarhus C Education Establishments

Website Contact the organisation

Administrative Contact
Helle Alstrup (Ms.)

ASTON UNIVERSITY

United Kingdom
EU contribution
€ 500 000

Address Activity type
Aston Triangle Higher or Secondary
B4 7ET Birmingham Education Establishments

Website Contact the organisation

Administrative Contact
Gareth Evans (Mr.)

VIB VZW

Belgium
EU contribution
€ 496 500

Address Activity type
Rijvisschestraat 120 Research Organisations
9052 Zwijnaarde - Gent

Website Contact the organisation

Administrative Contact
Rik Audenaert (Dr.)
UNIVERSITAET HOHENHEIM

Germany
EU contribution
€ 959,600

Address
Schloss Hohenheim
70599 Stuttgart

Activity type
Higher or Secondary
Education Establishments

Website
Contact the organisation

Administrative Contact
Hans-Peter Liebig (Prof.)

MARTIN-LUTHER-UNIVERSITAET HALLE-WITTENBERG

Germany
EU contribution
€ 416,000

Address
Universitaetsplatz 10
6108 Halle (Saale)

Activity type
Higher or Secondary
Education Establishments

Website
Contact the organisation

Administrative Contact
Manfred Jank (Dr.)

ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA

Italy
EU contribution
€ 606,000

Address
Via Zamboni 33
40126 Bologna

Activity type
Higher or Secondary
Education Establishments

Website
Contact the organisation

Administrative Contact
Andrea Previti (Dr.)

UNILEVER U.K. CENTRAL RESOURCES LIMITED

United Kingdom
EU contribution
€ 43,000
<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilever House, Victoria</td>
<td>Private for-profit entities</td>
</tr>
<tr>
<td>Embankment 100, EC4Y 0DY London</td>
<td>(excluding Higher or Secondary Education Establishments)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonathan Richard Powell (Dr.)</td>
<td></td>
</tr>
</tbody>
</table>

### UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA

<table>
<thead>
<tr>
<th>Country</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>€ 463 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piazzale Aldo Moro 5, 00185 Roma</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maurizio Palucci (Prof.)</td>
<td></td>
</tr>
</tbody>
</table>

### UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6

<table>
<thead>
<tr>
<th>Country</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>€ 408 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place Jussieu 4, 75252 Paris</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bertrand Friguet (Prof.)</td>
<td></td>
</tr>
</tbody>
</table>

### ACADEMISCH ZIEKENHUIS LEIDEN

<table>
<thead>
<tr>
<th>Country</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>€ 422 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albinusdreef 2, 2333 ZA Leiden</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TAMPEREEN YLIOPISTO
Finland
EU contribution
€ 234 000
Address
Kalevantie 4
33014 Tampere
Activity type
Higher or Secondary
Education Establishments
Website
Contact the organisation
Administrative Contact
Karin Wibier (Ms.)

CRANFIELD UNIVERSITY
United Kingdom
EU contribution
€ 478 000
Address
College Road
MK43 0AL Cranfield - Bedfordshire
Activity type
Higher or Secondary
Education Establishments
Website
Contact the organisation
Administrative Contact
Hannele Auffermann (Ms.)

UNIVERSITAET INNSBRUCK
Austria
Address
Innrain 52
6020 Innsbruck
Activity type
Higher or Secondary
Education Establishments
Website
Contact the organisation
Administrative Contact
Beatrix Grubeck-Loebenstein (Prof.)